DOCUMENT RESUME

ED 429 340 EA 029 739

AUTHOR Girton, Kathryn M.
TITLE Educational Alliances, Property Rights and Trust: Issues of Transaction Costs in the Transfer of Credit.
PUB DATE 1998-00-00
NOTE 20p.; Paper presented at the Annual Meeting of the American Educational Finance Association (Mobile, AL, March 11-15, 1998).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Articulation (Education); Cooperative Programs; Credit Courses; *Educational Economics; Higher Education; *Partnerships in Education; Student Welfare; *Transfer Policy; Transfer Programs
IDENTIFIERS Transaction Costs

ABSTRACT

Using transaction-cost economics as a theoretical lens, this paper analyzes educational alliances, which are agreements between educational organizations, such as those between 2-year and 4-year colleges. Transaction costs are those costs associated with the movement of course-credit hours across different institutional environments. The report suggests that standard cost-benefit analyses, as offered by standard economic models, do not serve well the purposes associated with transfer and articulation and that decision-making processes affecting student transfers are foremost about cost minimization and not about student welfare. Part 1 of the paper discusses the Utah System of Higher Education's transfer policy and the decision-making parameters that influenced the formation of this policy. Part 2 provides a brief explanation of transaction-cost economics as outlined by Williamson. The paper focuses on state-level decision making and the creation of educational alliances, the central components of transfer issues, the debate over intellectual property rights, the presence of trust, education as a trust market, information asymmetry, human costs and life chances, ambiguous and uncertain technology, bounded rationality, opportunism, contrasting assumptions, and implications of cost management. The report states that more research is needed to understand the effects of moving credit hours across institutional environments. Contains 20 references. (RJM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 429 340

EDUCATIONAL ALLIANCES, PROPERTY RIGHTS AND TRUST:
Issues of Transaction Costs in the Transfer of Credit

American Educational Finance Association
March 11 -1 5, 1998
Mobile, Alabama

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Kathryn M. Girton
Doctoral Student
Department of Educational Administration
University of Utah
Salt Lake City, UT 84112

BEST COPY AVAILABLE

K. Girton

EA 029 739

Introduction

"We as a nation rely heavily on our higher education system to unlock the doors of opportunity, to foster equity, to promote success, and to encourage advancement by the full range of citizens" (American Council on Education, 1991, p. 1). In order to achieve these goals, initiatives, which create *educational alliances*, are being proposed and enacted across the United States. One of the most salient examples of these alliances is found in the institutional arrangements between two-year and four-year higher education organizations. These arrangements commonly referred to as Transfer and Articulation Agreements construct relationships between organizations that did not previously exist. As Bender (1990) notes, "Failure of local educational policymakers to work together voluntarily is apparent from the increased involvement of state legislatures in transfer/articulation matters...The increased activity of legislatures over the past five years makes it apparent that the absence or failure of local voluntary articulation will be met by state-level mandatory policies" (p. ix). To examine the transfer function, from a state level perspective, I conducted an analysis of the Transfer of Credit policy R471, from the Utah System of Higher Education (USHE).

I use transaction cost economics as my theoretical lens (Williamson, 1979, 1986, 1996). Transaction costs are those costs that are associated with the movement of course credit hours across different institutional environments. This definition arises from this policy analysis. The formal definition of transaction costs are "those costs that arise from the movement of intermediate products across technologically separable interfaces" (Williamson, 1986, p.). From this worldview, I claim that our decision making processes (and resultant policies) affecting the transfer function are first and foremost about *cost minimization,* and secondarily about student welfare and democratic aims. This study suggests that standard cost-benefit analyses, as offered by standard economic models, do not serve well the purposes associated with transfer and articulation; these analyses fail to account for the black box of higher education, the internal dynamics of the institutions (Cohen, Brawer and Bensimon, 1985).

In part one of this paper, I review the Utah System of Higher Education's transfer policy R471 and the decisionmaking parameters that influenced the formation of this policy. Part two provides a brief explanation of transaction cost economics, as outlined by Williamson (1979,

1986, 1996). This theory provides the lens for understanding the costs and governing rules of the transfer function. I conclude with a limited foray into the issue of "cost management."

I. State Level DecisionMaking: Originating Transfer Policy

In 1986, the Board of Regents of the Utah System of Higher Education (USHE) developed a Master Plan which set the parameters for achieving efficiency in the management of the higher education system. The plan called for diverting students away from the four year research institutions to the state-run community colleges. This action was undertaken to make the higher education system more efficient and effective by "directing a high percentage of new lower division enrollment growth to the community colleges" (R301.6.1, Master Plan Executive Summary, p. 3). Justification for this plan came from the realization by the State Board of Regents that "high enrollment concentration is in more expensive research universities and low concentration resides in community colleges" (R301.6.1, Master Plan Executive Summary, p. 3). Table 1 and 2, below, highlight total enrollment for the Utah System of Higher Education for 1980-81 through 1984-85, by four-year and two-year institution. These tables provide some of the information that the Board of Regents had available at the time this plan was crafted.

Table I
Total Enrollment, for Four Year Institutions, 1980-81 through 1984-85
Utah System of Higher Education

Institution	1980-81	1981-82	1982-83	1983-84	1984-85
University of Utah	22,970	23,373	24,364	24,911	24,886
Utah State University	9,939	10,290	11,112	11,849	11,544
Weber State	10,677	10,759	10,690	10,871	10,717
Southern Utah State University	2,058	2,106	2,378	2,543	2,642

Note. From, Utah System of Higher Education 1994-95 Data Book. (December, 1993). Enrollment Data. Salt Lake City, UT: Office of the Commissioner of Higher Education.

As shown in Table I, the four year institutions experience an enrollment range of approximately 2,000 to 24,900 students. Southern Utah University, the institution with the lowest enrollment of all of the four year schools, is the most rural of these higher education organizations. It is located 247 miles from the state capital, Salt Lake City (Rand McNally Road Atlas, 1991, p. 97,). This capital city is located in the most densely populated region of the state, with more than 500 people per square mile (Utah Economic and Business Review, Jan/Feb 1997, p. 5). It is also the major metropolitan region in Salt Lake County with the largest population of any Utah county totaling 818,860 people as of 1996 (Utah Economic and Business Review, Jan/Feb 1997, p. 9).

In contrast, Table 2 below notes total enrollment figures for the two year state-run institutions of higher learning, for the same time period. With the exception of Salt Lake Community College, and Utah Valley State College, which reside in highly populated Salt Lake and Utah County, respectively, the three other institutions reside in the most rural regions of the state. Their enrollments are generally less than 2,000 students.

Table 2
Total Enrollment, for Two Year Institutions, 1980-81 through 1984-85
Utah System of Higher Education

Institution	1980-81	1981-82	1982-83	1983-84	1984-85
College of Eastern Utah	1,218	1,290	1,298	1,359	1,412
Dixie College	1,790	1,904	2,010	1,865	1,904
Salt Lake Community College	5,937	6,383	7,508	8,060	8,289
Snow College	1,283	1,388	1,411	1,306	1,319
Utah Valley State College	4,602	4,941	5,593	6,093	5,818

Note. From, Utah System of Higher Education 1994-95 Data Book. (December, 1993). Enrollment Data. Salt Lake City, UT: Office of the Commissioner of Higher Education.

Given the low enrollment numbers in the rural schools, and the perception, by the Board of Regents, that they were not being adequately used, it was specifically recommended that students be encouraged to attend these more distant schools. "Efforts will be made to inform prospective students of the unique advantages of attending smaller rural and residential campuses" (R301.6.5, Master Plan Executive Summary, p. 3). This recommendation appears logical from a rational, cost-benefit calculation. Resources appeared to be underutilized; enrollments were projected to increase.

At the time the Master Plan was crafted, growth in enrollment was anticipated to rise 40 percent from 71,000 students to 100,000 by the year 2,000 (R301.3.3, Master Plan Executive Summary, p. 1). The data on student enrollment figures indicates that the Utah System of Higher Education actually experienced in excess of 100,000 students in the 1994-95 academic year. Thus, the Master Plan was ten years ahead of the phenomena it was anticipating. Table 3, below, notes the actual and projected enrollment figures from 1994-95 until the millennium, the date by which the effective design of the system of higher education needed to be accomplished.

Table 3

Utah System of Higher Education,

Total System Enrollment 1994/95 - 2000/01

Academic Year	Enrollment Numbers
1994/95	101,551
1995/96	102,881
1996/97	105,290
1997/98	110,707*
1998/99	117,046*
1999/2000	121,318*
2000/01	124,949*

Note: From Utah System of Higher Education 1996-97 DataBook, January, 1996. Enrollment Data. Salt Lake City, UT: Office of the Commissioner of Higher Education.

* Projections.

The language used in drafting this Master Plan mirrors many of the national concerns expressed by the American Council on Education. Educational opportunity and social welfare are noted as the primary driving values for this system of higher education.

> "A strong system of higher education is essential for the maintenance of a vibrant and progressive society. The Utah State Board of Regents has, therefore, developed a revised and updated Master Plan for Higher Education, designed to ensure that the benefits of high quality higher education are made available to students and citizens as the number one priority for social progress and economic well-being of the state and its people" (R301.6.1, USHE Master Plan Executive Summary, p. 1).

The Master Plan serves as the historical origin for the policy that commands the attention of this policy analysis. From this document, Utah State System of Higher Education Policy R471, *Transfer of Credit*, was created. Articulation agreements were also formed between schools of higher education. They serve as supporting policies to the objective of transferring credit; they result in the creation of educational alliances between institutions.

In creating these alliances, opportunities were thought to be made available for students to access the more scarce and prestigious universities in the system of higher learning. "Senior public institutions are not located in every center of population in the state; therefore collaborative inter-institutional arrangements should be undertaken" (R461, Utah System of Higher Education Policy on Admissions, Access and Articulation, 1984, p. 1). However, access is not the only moral appeal being made in the transfer and articulation policies. A guarantee of outcomes is also offered. These policies suggest that any student who completes general education requirements in any institution of higher learning, in the Utah System of Higher Education, will not have to complete any additional liberal education courses. They will receive full credit for their first two years of college education and be ready to move on to disciplinary work. This implicit contract is offered almost as an insurance policy in the language of the document. In policy R465, related to general education requirements for transfer students in the Utah system, it is noted:

> "Any USHE institution must consider its General Education requirements completed by transfer students who have completed General Education requirements by any other USHE institution. This policy [R465] provides assurance to transfer students that they will not lose General Education credits by requiring all institutions to accept at full

value all (sig) coursework approved by sending institutions" (Foxley, 1997, p. 3).

An economic problem surfaces. Given that the production of education is ambiguous and highly idiosyncratic, any guarantees that are made, in general, are suspect (Rowan, Raudenbush, and Cheong, 1993). No one can guarantee that students will be ready for disciplinary work in a four year environment, when they have completed all prior courses at a two year institution. The policies implicitly suggest that such a promise can be fulfilled. Thus, the values of "access and outcome" are the value tensions in the Transfer of Credit policy, while the economic costs associated with the transfer of credit prevent these values from being realized.

II Transaction Cost Economics: The Heart of Transfer Issues

In this brief section, I clarify the rationale for the use of Transaction Cost Economics, a theory of organizational economics, to explain the phenomena of the transfer of credit in higher education (Barney and Ouchi, 1986; Williamson, 1975, 1996). Transaction cost economics combines three concepts in its theoretical form: bounded rationality, asset specificity, and opportunism. Following March and Simon (1958), bounded rationality implies that we have imperfect information, limited cognitive capacities for processing information, and limited time and energy with which to attend to the circumstances within which we find ourselves. Thus, decision making in this view is imperfect and not the result of an examination of a rich and representative set of alternatives from which the best choice is made in terms of weighted costs and benefits.

Asset specificity refers to the uniqueness of the asset or resource which is required to produce classes or engage in research projects. For example, a faculty member whose knowledge is highly specialized for example in cancer research, can barter for a great deal of discretion over their research projects, in the negotiation process, because their talents are rare. Students who work with faculty, for instance, who have a unique set of skills or information-processing ability can negotiate for a higher return on their time by requesting participation in specialized projects given that their skills are highly specialized. In Williamson's view (1979, 1986, 1996) skills, knowledge and talents are all assets that individuals possess and they have *the right* to negotiate the use of those assets. If students and faculty possess only generalized knowledge, then their ability to gain discretion over their time and the process by which they provide a service or

product is limited because the supply of the asset or knowledge is plentiful.

Opportunism refers to individuals who pursue their self-interest with guile (Williamson, 1979, 1986, 1996). This suggests that in the absence of constraints, or outcome measures, individuals will lie, cheat, or steal for the purpose of increasing their personal welfare at the expense of the welfare of the institution. For instance, some faculty may not engage students in high level learning projects if there is no indicator measuring the outcomes of their teaching performance and duties. For Williamson, this behavior is not found in everyone, all the time, but it is apparent in some people, some of the time, in the absence of constraints or in the absence of incentives for productive behavior. Handy (1998) notes, "a competitive philosophy *within the firm* will encourage people to look first to their own interests, and secondly, to the firm they work for" (p. 19). Thus, for Handy as long as institutions motivate their personnel, within the firm, with a competitive philosophy, they are subject to high transaction costs as individuals fail to cooperate by *not* providing needed information, resources or a sense of support across organizational lines.

The analytical feature most salient in research investigations, using transaction cost economics, is the transaction (Commons, 1934). In this study, the transaction that is most salient in transfer and articulation is the movement of course credit hours across institutional environments. From this lens the focus of investigation should not be on the student, as is found in a large body of transfer research, but it should be on the administrative rules and incentive systems that structure how courses are produced, how they are valued and how the credit hours may be discriminated against in admissions and matriculation regulations.

Property Rights: A Subcomponent of Asset Specificity

The issue of property rights enters the story of transfer and articulation when it is realized that intellectual property rights are one form of individual assets, of one's private property. Thus, faculty have a right to fulfill their professional obligations in anyway they deem fit because of their intellectual property rights. Students have a right to share their knowledge and analytical abilities where they believe they will get the highest return for their investment of time, energy and commitment. Policymakers have a right to draft policies that meet the fulfillment of their obligations.

For transfer and articulation, students may have a right to transfer to a new institution and to share their knowledge with whomever they choose. They also have the right to leave any educational institution that is not meeting its obligation, as they perceive it. The tension arises when faculty also exercise their rights not to mentor every one of their students when they have limited time, energy and ability and a competing research incentive. In a four year research environment, this means that students who attempt to transfer "in" from a teaching institution may find the costs of adjustment and learning high as they enter a new environment in which the key players, the faculty, respond not to a teaching incentive but to a research motive.

As an example in explaining the transfer of credit, in higher education, the time, energy, and attention that students devote to acquiring new information, via courses, represents the resources "spent by" or deployed by the individual. Individuals deploy their resources, in an organizational setting, to obtain a return in the form of new knowledge or skill and a return in the form of a credit hour value, which signals to other organizations their learning within the educational institution. When the student-customer takes their credit hours to another institution, and is told they are not valued or will not buy the individual admittance into a program, the individual in essence gets "no return" from their previous expenditures. Thus, all the time, energy, emotion and aspiration that drove the individual to take classes, in the first place, might end up representing wasted resources if the transfer is unsuccessful. Thus, some educational organizations may be, unintentionally, driving themselves right out of the market, if they fail to deliver the service (courses) and product (credit hours) that can survive movement across institutional environments. The threat to institutional viability becomes real when students choose to vote with their feet, and exit one institution in order to spend their dollars at another shop in the educational market, in the absence of loyalty to any specific educational provider (Hirschman, 1970).

In searching for studies that verify the costs of credit hour exchange, and differentiated educational experiences, it was found that no effort has been exerted in empirically verifying the existence of transaction costs, in higher education systems. While attempts have been made to define the meaning of the word transfer, most of the evidence used to make sense of this phenomena come from student-record databases. This type of evidence reveals a primary

concern, by researchers, with student g.p.a., student attrition rates, and student retention rates. No one has examined the internal economics or the incentive structures of the institutions to determine if there are any institutional factors which contribute useful explanations about *the processes* associated with the transfer function in higher education. This paper arises from the foundational research laid by the author, who is in the process of completing such an empirical investigation.

The Presence of Trust

Finally, the implications of "trust" for the transfer function in higher education have not been explored. In this policy study, trust has emerged as a key construct in the conceptual frame that explains this phenomena (Barber, 1983). I claim that individual students trust institutions, especially educational institutions, to be operating in their behalf and to deliver on their promises as marketed in their policies and programs. This trust arises from the expectation that faculty and educational administrators will exercise their fiduciary obligations and technical competence in the fulfillment of their obligations (Barber, 1983). It also arises from the fact that higher education is a premiere example of an asymmetric information environment (Akerlof, 1970). This means that the student-buyers will always be at a disadvantage and have incomplete information about the institutions of education and the institutions will always know more about their offerings than the students (or parents). In this context, it is essential that people trust one another, to maintain their educational entities and to educate the members of the community.

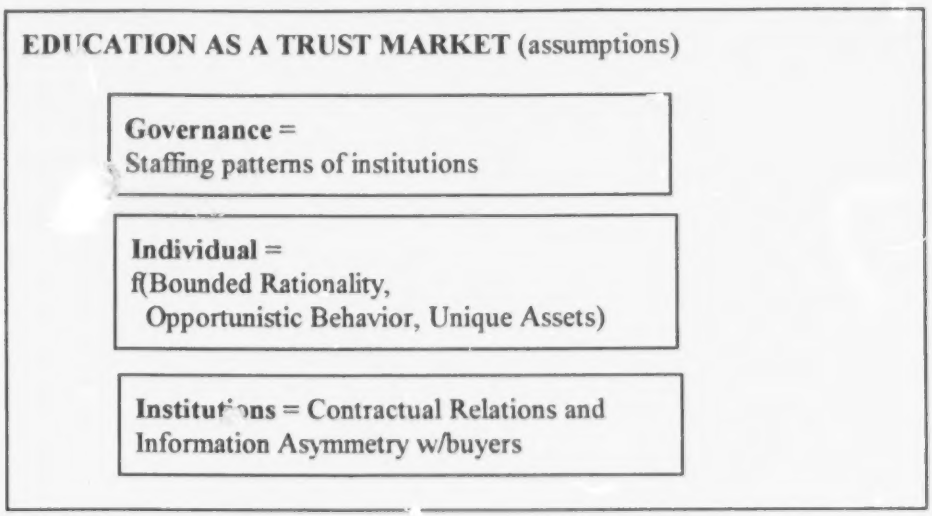
The issue of trust also arises when it is realized that the use of Transaction Cost Economics steps aside from traditional neoclassical assumptions and invites in uncertainty, complexity and bounded rationality, conditions which require a sense of trust in order to navigate them. Most of the assumptions run counter to previous economic theorizing and commonly used decision making strategies.

II Conceptual Framework/Macro

This framework offers an alternative view of the macro features of the economic environment in which educational services are provided, in contrast to traditional neoclassical models. And, it offers a microview in which the transactions, between individuals, take place. Diagram 1, spotlights the key concepts which are relevant to the macro environment in which

transfer and articulation take place.

Diagram 1
Conceptual Framework: Educational Industry



Education As a Trust Market

The macro conceptual frame that has emerged from this study suggests that education fundamentally operates in a "trust market" and that the trust market is distinct to the educational sector. There are two key dimensions that are ever present in education: the tension of individuals seeking to establish or improve their life chances and the uncertainty surrounding the teaching process, which seems to require a sense of compatability between students and teachers in order for learning to occur. The five aspects of a trust market, that distinguish it from a private-sector, profit-based exchange market, are noted below. Additionally, the key assumptions that define the workings of the trust market are contrasted with the assumptions underlying neoclassical economics.

Trust markets are characterized by five key features:

1. Information asymmetries
2. Human Costs & Life Chances

3. Ambiguous and Uncertain Technology
4. Bounded Rationality
5. Opportunism

Information Asymmetry

In any market situation, an information asymmetry occurs when the seller has more information that the buyer and the buyer cannot obtain full information about the seller. Thus, the consumer student is vulnerable to the seller, or the educational institution to deliver what it purports to deliver because our students (and their parents) have incomplete information about what will and should occur in the classroom and administration of the colleges or schools and the rules for negotiating the educational system (Akerlof, 1970). Additionally, college and university administrators have little incentive to generate rich information about their institutions' delivery of courses and research products, especially the potential costs to consumers of participating in particular systems because their interests are aligned with the viability of the institution. Further, when individuals are hired into faculty positions, this forms a pattern of contractual relations and if the faculty are specialists then an information asymmetry exists between those who initiated the contracts and those who fulfill them. Trust is required to participate in the environment, in a contractual relationship,

Human Costs & Life Chances

On the outcome side of the educational industry resides a high indirect cost to the customers, which is unique to the industry itself. The human cost in terms of the life chances that individuals have for gaining further education or well-remunerated professional positions depends, in part, upon the intellectual capital that students have acquired (Dahrendorf, 1979; Brookings, 1995). Thus, if students do not do well in the educational system and do not obtain the skills and knowledge that the need to survive in a contemporary society, with some sense of self-regard, then they will bear the full cost in terms of not achieving a minimal standard of some quality of life. The human costs associated with the need for economic survival are real and they are more strongly borne by the customer-student than by the teacher or professor who is already employed and, if tenured, well situated in their life circumstance.

Ambiguous and Uncertain Technology

In education, the core technology of research and teaching is thought to be ambiguous and uncertain because it cannot be "standardized" to meet the needs of every student. *The diversity of human needs* in learning means that the delivery of teaching needs to be multifaceted and dynamic in order to keep pace with the changing and varied needs of people. In large classes, under the constraint of limited time, instructors are challenged to meet the needs of "every" student in the classroom because of the narrow base of information that faculty have about the personalities and development needs of each of their students, and the element of creativity that is present in any teaching (or research) endeavor.

Bounded Rationality

To live and work with bounded rationality means that we live with the limits of imperfect cognitive processes and inabilities in processing information. The assumption is that we are not perfectly rational human beings able to move from point A to point B if we simply line up our desires, energies and intentions (March and Simon, 1958). Instead, the process by which we acquire information, process it, and use it to make decisions is a complex one constrained by our patience, emotional attitudes, time, and energy sources for fulfilling our obligations.

Opportunism

Opportunism arises when individuals pursue their self-interest with guile (Williamson, 1986). This assumes, in education, that when individuals are employed within contractual relations "sometimes" we will see behavior "some of the time" that is not in line with the objectives of teaching and learning and is not in the best interests of students. This assumes that not all individuals will act on a social ethic of responsibility to the group of which they are a part. Thus, the importance of examining contractual relations in school financing patterns, and the responsibilities associated with them, is to limit the discretion of decisionmakers.

Contrasting Assumptions

The table, below, notes the assumptions of a trust market in comparison to neoclassical models of economics. This comparison arises from the use of transaction cost economics as the theoretical tool for analysis of transfer and articulation policies.

Diagram 2
Contrasting assumptions of the foundations of neoclassical microeconomic theory and Trust Market Industries

Characteristic	Neoclassical	Trust Market
Perfect or fairly complete information	Yes	No
Information acquisition & storage costly	No	Yes
Decision making costless	Yes	No
Preferences Complete	Yes	No
Transaction Costs Absent	Yes	No
Economic behavior uniform	Yes	No
Rationality Limited	No	Yes
Opportunism Present	No	Yes

Adapted from: Tisdell,C. (1996). Bounded Rationality and Economic Evolution, Brookfield, VT: Elwood Edgar Publishing Company.

Conceptual Framework/Micro

The micro framework that has emerged centers on four concepts: costs, rights, negotiations and incentives. The costs of engaging in exchange relations is negotiated by individuals who perceive that they have a right to pursue particular ends in light of the various incentive structures of the organization. Diagram 3, below, notes the micro-view of individuals in organizations and it notes the relationships between these four concepts.

Diagram 3 MicroView of Transaction Costs Economics

1. Incentive Environment
   2. Negotiations: Require Trust, Form Alliances
      3. Individuals Incur Costs, Have Rights in Contracting
         4. Influenced by Uncertainty, Specialization, Assets

IV Cost Management: Implications

Four key cost management questions have arisen in the analysis of this transfer and articulation policy using transaction cost economics. These questions include:

1. How is the cost burden of providing educational services shared between institutions and students?
2. How much risk, due to uncertainty, is the customer-student incurring as a result of buying their educational product from us? Can we guarantee our product?
3. How have we structured the incentives under which our school faculty operate?
4. Is there a relationship between the cost of credit hour production and its movement across institutional environments and the types of contracts that structure the higher education environments?

From these questions, a working definition of education, which takes into account costs, is offered: *Education is a process of interaction between teachers and students, where the teachers have greater knowledge about the process of learning when compared to students, and where the students (and parents) carry a large portion of the risk and costs of learning. It is also a process in which students are extraordinarily vulnerable to the decisions that teachers make and the biases that they hold.*

Given this view, it behooves finance professionals to examine the contractual obligations that faculty operate within, and the activities for which they are responsible (Hoenack, 1988). It may also become important to entertain the strategy of conducting value-chain analysis in lieu of value-added analysis as is typically done in economic examination.

Value chain analysis suggests that educational organizations will remain viable only if they can sustain either differentiation or cost advantage. To do so requires that "firms manage its value chain relative to the value chains of its competitors" (Shank and Govindarajan, 1993, p. 50). Value chains are those sets of distinct, interrelated activities that make up the building blocks by which industry creates a service (or product) valuable to buyers. For each activity, cost, revenues and assets must be identified and quantified. Thus, each activity has its own source of

competitive advantage and the question is raised, should this activity be bought outside of the firm or made within the firm? Shank and Govindarajan (1993) suggest that firms can enhance their viability by not only understanding their own value "from design to distribution" but also by understanding how a firm's activities, of value, fit into customer's value chains and the chains of competing suppliers (p. 53).

Applying this to transfer education, it is recommended that educational institutions examine the provision of courses via internet technology, in classrooms, through independent study, or television programming. An analysis of how course credit is assigned through each of these means would also be examined. Student's preferred mode of learning would be investigated as would the alternatives that students have in the educational marketplace and why they are or are not choosing to go with the alternatives. This view suggests that cost management would require a process of mosaic building to understand how the pieces fit together, when considering the cost and value chains of the elements of market based interactions.

In the words of Shank and Govindarajan (1993), "The value chain concept can be contrasted with the internal focus that is typically adopted in managerial accounting. Management accounting typically takes a value-added perspective" (p. 54). Cost, in this big picture view is driven not by volume, or scope, or scale, and variable and fixed costs are not considered useful concepts. In this type of analysis, structural and execution *drivers* are examined, where the latter are the most important given the usually dated nature of structural information.

The most relevant executional driver is thought to be "quality" and in transfer education, "quality" of the credit hours is an issue as many faculty feel that the quality of two year schools is insufficient for preparing students for rigorous analytical work in four year institutions. Keeping in mind quality as a driver of costs, it is suggested by Shank and Govindarajan (1993) that an exponential equation be used for each factor involved in driving cost and logarithms and regression analysis be used as the methodology for deriving the quality of the educational process or product.

While many people may already use this form of analysis in the cost management of educational systems, it appears that there is much work to be done in understanding the elemental activities associated with course delivery and research production. Transaction cost economics

asks for detail, at the most microlevel, about the costs associated with the activities of moving students and credit hours across institutional boundaries. The observation remains - we know very little about the costs of moving credit hours across institutional environments because we have not taken a strong economic empirical or theoretical lens to this phenomenon which takes into account the uniquess of the educational industry. This author hopes to set the stage for such an examination in this domain.

BIBLIOGRAPHY

Akerlof, G. (August, 1970). The market for lemons: Quality and uncertainty and the market mechanism. Quarterly Journal of Economics, 488-500.

American Council on Education (1991). Setting the national agenda: Academic achievement and transfer. Washington, D.C. American Council on Education.

Barber, B. (1983). The logic and limits of trust. New Brunswick, NJ: Rutgers University Press.

Barney, J. and Ouchi, W. G. (1986). Organizational economics. San Francisco, CA: Jossey Bass.

Bender, L. W. (Ed.) (1990). Spotlight on the transfer function: A national study of state policies and practices. Washington, D.C. American Assocation of Community and Junior Colleges.

Brookings, A. (1996). Intellectual capital. New York, NY: Thomson Business Press.

Cohen, A. M., Brawer, F.B. and Bensimon, E. (1985). Transfer education in American community colleges. Los Angeles: Center for the Study of Community Colleges.

Dahrendorf, R. (1979). Life chances. Chicago, Il: University of Chicago Press.

Foxley, C. (January, 1997). Memorandum on policy R465 general education action. Salt lake City, UT: Office of the Commissioner of Higher Education, State Board of Regents.

Handy, C. (1998). The hungry spirit. New York: Broadway Books.

Hirschman, (1970). Exit, voice and loyalty. Cambridge, MA: Harvard University Press.

Hoenack, S. (1988). Economics within organizations.

March, J.G., and Simon, H. A. (1958). Organizations. New York: Wiley.

Rowen, B. Raudenbush, S. & Cheong, C. (1993). Teaching as a nonroutine task: Implications for the management of schools. Educational Administration Quarterly, 29(4), 479-500.

Shank and Govindarajan, (1993). Strategic Cost Management.

Tisdell, C. (1996). Bounded rationality and economic evolution. Brookfield, VT: Elwood Edgar Publishing Company.

Utah State Board of Regents (1984). R471, Transfer of Credit Policy. Salt Lake City, UT: Office of the Commission of the State Board of Regents, Utah System of Higher Education.

Williamson, O. (1979). Transaction-cost economics: The governance of contractual relations. Journal of law and economics, 22: 3-61.

_____ (1986). The economic institutions of capitalism. New York: The Free Press..

_____ (1996). Mechanisms of governance. New York: Oxford University Press.